AFRINIC Webinar - Exploring African ccTLDs: Trends, Challenges, and Opportunities

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(AI transcript - lightly corrected)

Stephen Honlue: Welcome to everyone. We are so thrilled to have you here today for this webinar, and we hope to have very interesting discussions with our panelists a full house panelist to discuss about one of the critical components of the Internet. The domain name system, and today particularly, we are going to talk about the ccTLDs, that's country code sub level domains. And we are going to explore the trends, the challenges, and opportunities we have in this sector. Together with me today, I'm going to have Mr. Barrack Otieno from Kenya, General Manager of Africa Top Level Domains Organization, that's AfTLD. Mr. Yazid Akanoh, technical Engineer Specialist for the Middle East and Africa for ICANN, Mr. Lucky Masilela, chief Executive Officer at ZA Central Registry, and Mr. Albert Kamga, Director of Standardization and Cooperation at ANTIC. All right that's the array of panelists that we are going to be having today to discuss about the trends of ccTLDs in Africa.

And you must know that during the recent years the African digital landscape has evolved a lot. And one, one critical component of this of this, of the Internet landscape is the domain name. And today these experts are going to share with us their insights their expertise, their knowledge, their experience about how this critical piece of of the Internet has evolved the story behind the trends the opportunity, the challenges and so forth and so on. The topic of the day is about the ccTLDs, and I'm going to start with Mr.

Albert. Mr. Albert, if you can quickly introduce yourself to our audience. We have 96 of them so far.

Albert Kamga: Good morning, Stephen. Good morning to all the co panelists. Good morning to all the participants. As you said, I am Albert Kamga. I am the Director of Standardization and Cooperation at ANTIC.

ANTIC is the registry of CM. I am telecommunication engineer and I am also lawyer. So that is what I can say for now. Thank you.

Stephen Honlue: Wow, what a blend. Telecommunication engineer plus lawyer, that is very interesting to have a lot of policies that we need in this. In this area. So thank you for joining us today.

I would like to take the next the next panelist that's Mr. Lucky. Please, Mr. Lucky, can you introduce yourself?

Lucky Masilela: Thank you. Thank you, Stephen. And good morning and afternoon to all the colleagues that have joined us across the globe and the continent. My name is Lucky Masilela. As Stephen has said, I'm the CEO of ZACR.

Now, where I sit in a very dynamic space, which is continuously moving. So one day you will hear that I'm also part of the ZARC. So please, this is still me and this is still a company that is responsible for the administration of the four second level domain names in South Africa. which is co dot za, org dot za, web dot za, and nom dot za. It's only a pleasure that I'm part of this panel to share our journey of the domain name growth in South Africa. Thank you.

Stephen Honlue: Thank you very much Mr. Lucky. Mr. Lucky has been instrumental in the Internet community in Africa. He's still here helping this community to grow.

Thank you for your contributions. And yeah, so next is is Barrack Otieno. Please can you briefly introduce yourself?

Barrack Otieno: Good morning, good afternoon, good evening. Salaam alaikum, bonjour à tous. My name is Barrack Otieno. I've had the honor of leading the Africa Top Level Domains Organization Secretariat, which is one of the African Internet organizations or AF Stars. I'm happy to be here, and I'll be speaking in a short while.

Thank you, Stephen.

Stephen Honlue: Thank you so much, Barrack. So the last but not the least. The youngest, Yazid, is going to also introduce himself.

Yazid Akanoh: Thank you Stephen. Hi, everyone. This is Yazid. I'm from Africa, but I'm based in Benin. And I work for ICANN Internet Corporation for Assigned Name and Numbers. My role there is what we call technical engagement.

Basically We deal with the technical stakeholders of the Internet in Africa and Middle East region to help them better, understand and implement. The DNS related standards and and the best operational practices, and we do also help the the law enforcement organizations, regulators, To also understand how the technical part of the the internet can actually affect the business part of it.

That's basically what I do and we are too for the region myself and Simon Maier who is based in Nairobi, Kenya. Thank you.

Stephen Honlue: Thank you very much. If you are here today, at this moment, you are blessed. We have a very amazing panel. And these amazing people are going to share with us the story around ccTLDs in Africa.

So without using much of your time, I'll dive directly to the first panelist today. That's Barrack, and Barrack is going to walk us through like a brief intro and, talk about the organization that he's managing at the moment. Barrack, you have the floor.

Barrack Otieno: Thank you very much, Stefan. And once again let me recognize.

Friends and colleagues from the African Internet community and also leaders from the various Internet organizations who've joined us today. I'm going to make a presentation that I did at the ICANN 78 meeting but upon reflection I felt that it was more appropriate to present it to the African community.

And I thank AFRINIC for creating this opportunity. I think when AFRINIC made a call for presentations I did I didn't have a presentation, but I submitted something and thank you to the AFRINIC team for putting up with us. Until we were able to be as organized. So in this presentation, I'll talk about ccTLDs in Africa and just take us through our walk down memory lane.

I know there are different people in the room. There are those who are who have been around, but there are also those who are new and those who are critical in moving our digital economy on the continent forward. And I start by positing that if you don't know where you're going, then any road can take you there.

I think we are at an interesting period where we can turn around. The trajectory or the direction of the African continent using the digital tools and resources.

So by way of introduction, my name is Barrack Otieno I am the General Manager, Africa Top Level Domains Organization. We are based in Nairobi, Kenya, but also registered in

Mauritius and in Nairobi our secretariat can be found at the Kenya Network Information Center.

All right. I will start by just reflecting on some of the objectives of this session that we are having today. At the end of this session, we expect to gain insights into the current trends and developments shaping the African country code top level domain landscape. This includes aspects such as registration patterns, domain growth, market dynamics, and more, and emerging technologies impacting ccTLD development.

The other objective is to understand common challenges faced by African country code top level domain registries, such as regulatory hurdles, technical infrastructure limitations, cybersecurity concerns, competition from generic top level domains, and more.

We will also uncover the diverse opportunities offered by various African country code top level domain registries through case studies and expert analysis. This includes leveraging domains for economic development, promoting local content and businesses fostering digital innovation, enhancing online security and trust, and contributing to a vibrant digital ecosystem across the continent. And we will also gain insights into the policy frameworks governing country code top level domain management and governance in Africa, as well as the importance of collaboration and partnership in enhancing ccTLD ecosystems, equipping participants to engage in policy discourse and collaborative endeavors effectively.

So let me start by saying that The Internet is more relevant local. We have to think locally and act globally. And as we talk about ccTLD management, I would like to call upon our participants that you and I are responsible

You could be responsible as a registrant, you could be responsible as a registrar who is providing services, or you could be responsible as a registry who is charged with the responsibility of managing some of the critical Internet resources. But first, I will take us through the outline of my presentation.

I'll talk about Africa Top Level Domains Organization, a historical perspective of the domain of the country code Top Level Domain Industry in Africa, some of the milestones and some proposals or suggestions on what the future holds. I don't know what the future holds. Most of you have the answer, but I have some few suggestions.

So for those who are interacting with Africa Top Level Domains Organization for the first time, AFTLD, or Africa Top Level Domains Organization, acts as a focal point for all the African top level domain managers to discuss policy matters that affect country code top level domain registries globally, and then to present the group's position in one voice.

AFTLD has sister organizations in the other regions. In Europe, we have the Council for European National Top Level Domain Registries. We have the Latin America and the Caribbean Top Level Domain Registry Association, and we have the Asia Pacific Top Level Domain Registry Association. So we are on the naming side.

Most of you may know that we have naming and numbering, and our sister or brother AFRINIC is on the numbering side, and we work very closely because we are about ensuring that the Internet is available for everyone.

AFTLD commenced its journey in May 2001 at an Africa Network Operators Group workshop in Accra, Ghana.

Most of you might know already about the Africa Network Operators Group, or AFNOG that is led by Professor Dr. Nii Quaynor otherwise known as the Father of Internet in Africa. And it was during one of these sessions that the Africa Top Level Domains Organization was conceptualized.

The pioneers of this organization were Dr. Nii Quaynor, whom I've mentioned, Yann Kwok, who was also a pioneer in Mauritius, and Brian Longwe who played a pioneering role in the Internet evolution in Kenya and Africa, who were tasked with the creation of the association and its formal establishment.

In December 20, 2002, Africa Top Level Domains Organization was incorporated in Mauritius. Later on in 2015 we also got incorporation in Kenya for purposes of addressing the logistics involved in discharging our responsibilities. On 26th of October 2003, the first Africa Top Level Domains Organization General Assembly was held in Carthage, Tunisia.

Its counterparts, APTLD Center, or Asia Pacific Top Level Domains Organization, Council for European National Top Level Domain Registries, and Latin America and the Caribbean Top Level Domain Registries participated. So we normally work together with the other regional organizations. In 2003 at an ICANN meeting in Montreal, Canada AFTLD issued its first communicate, which announced the global community on its establishment.

At that time, we had two members from Africa in the country code name supporting organization, launching group as we speak. We have 39 members. In the year 2024, the 39th member being dot mussel the only IDN ccTLD in Africa to be a member of the country code top level DO dome country code name supporting organization.

We, the journey continued and the whole objective of this meetings that I'm talking about was to strengthen. The country code Top Level Domain Ecosystem and also the Internet Ecosystem on the African continent. So in April 2008 AFTLD held a conference in Johannesburg, South Africa.

And this meeting was significant because it's also the time when one of the first studies that was commissioned to check on the status of country, top level domain registries in Africa was done by Dr. Paulus Nurenda, who has also pioneered and led the MW registry in Malawi in September, 2008.

Champion by the Internet Society. A course that was curated by the Internet Society, the internet corporation for assigned names and numbers, and the Network Startup Resource Center was held in the Netherlands, hosted by Ripe. RIPE is the sister of AFRINIC, which takes care of numbers in Europe.

In April, 2009,AFTLD held a conference in Tanzania and elected it's Pioneer Board and Pioneer President. In 2010, at the 38th ICANN public meeting again, another course was held alongside the ICANN conference the ICANN meeting in Nairobi, Kenya. In April 2011, again, a similar meeting in Accra, Ghana, but more importantly, the organization decided to establish a secretariat, and the Kenya Network Information Center took up the challenge and the responsibility to establish the secretariat.

And as we speak the Kenyan Network Information Center has lived up to the promise and ensured that it has a befitting secretariat for country quad top level domain registries in Africa, which will be launched next month. Thank you very much, KENIC. In April 2012, KENIC. The Zambia Information and Communications Authority, ZICTA hosted the AFTLD conference in Zambia, in Livingston, Zambia.

This was also a significant meeting because it heralded the launch of the Africa ccTLD and DNSSEC program, which I will talk about as I move along with my presentation. Some important milestones that the organization has championed is encouraging African country code top level domain registries to participate in the internet governance forum.

We had, we held sessions that created awareness amongst stakeholders in the internet governance ecosystem on the need to support their country code top level domain registries. I also spoke about the first ccTLDstudy. Our counterpart, and I believe Yazid is going to talk about this icon, has later on gone ahead to conduct subsequent studies aimed at helping us understand the status of the country code or the of the domain name system in Africa.

There's also been we had the launch of the African ccTLD and DNSSEC program in 2012 with the support of the internet society. And later on ICANN and again, Yazid will talk about some of the activities such as the DNSSEC Roadshow that have primarily been implemented by the Internet corporation for assign names and numbers.

Since then again, an important activity has been the Africa Domain name system forum. Again. Which was, the first meeting was hosted in the ICANN meeting in Durban in 2013 and held in collaboration with the Internet Society. Again as Africa, of the African ccTLD ecosystem, we pioneered an event that has gone ahead to be embraced in Africa.

and held in many other parts of the world. And as we speak, we are actually looking at ensuring that we bring this to country level. You notice that AFTLD started at an Africa Network Operators Group meeting. Right now, we are speaking of local NOGs or Network Operating Groups. Even from the domain name front, we are looking at having localized domain name system forum organized by local stakeholders.

Again, we launched the first five year AFTLD strategic plan in 2012, which ran up to 2016. This was significant because it helped us identify the challenges. within the African country code Top Level Domain Environment and what we needed to do to be able to address them. In 2010 less than 50 percent of African ccTLDs were actually automated.

As we speak, and with the support of the Internet Corporation for Assigned Names and Numbers, the Internet Society, the Network Startup Resource Centers, governmental bodies, and other AFSTAR and ISTAR organizations like AFRINIC we have ensured that at least over 90 percent of these country code top level domain registries now have an automated system.

We launched the second AFTLD strategic plan in 2018, and the focus was on sustainability. to build the business and policy ecosystems within the ccTLDs to ensure that they are, they were able to grow and become sustainable. Earlier on, country code top level domain registries were actually run as the research departments within universities.

Then in some countries they were taken over by private sector players in some countries like Kenya. They created special purpose vehicles public private partnerships that were able to ensure that the stewardship of the country code top level domain registries. Lastly, and another product program that was part of the Africa ccTLD and d nsec.

Program was a domain name observatory. And now we have onda. africa, which will be a one stop shop that will enable the community to get the statistics and information on how the country code top level domain registries are run. Our counterpart, ICANN, is also running similar initiative, and I think this is a testament to a market that is growing.

I would wish to pause there in the interest of time and then I will revert or come back to the presentation as I respond to the questions that have been set aside for me during the panel because I noticed that time is far gone and I still have quite a bit to present. So moderator, I'll bring back the floor to you and continue when I'm accorded time for the panel.

Thank you.

Stephen Honlue: Thank you very much, Barrack. That's quite insightful. Allow me to give the floor to Yazid, to bounce back on one or two initiatives that you collaborate together. Yazid please.

Yazid Akanoh: Thank you, Stephen and thanks, Barrack, for sharing with us this let's say good, I would say memories as well.

So I will maybe if the MO moderator also allows me to do to put the things into the context. What is the role of IAN and all of this? IAN is this organization that coordinates right globally the unique identifiers of the internet namely the IP addresses the.

Domain names the domain name system at the root level. But we coordinate all the policy related discussions around the global internet DNS infrastructure, of course autonomous system numbers as well. Those are, let's say the well-known unique identifiers of the internet and the way the internet works actually requires those identifiers to remain unique across the global internet.

And this is the major role that, that ICANN plays which is to coordinate those resources to make sure that the way they are assigned will help them be unique across the global Internet. And of course, because they are not infinite resources.

We also need policies to be set to be actually discussed until they, they get approved and and being applied within the community. And this is also what I can actually does. And when it comes to ccTLDs. I think the first role or the first relationship between ICANN and the ccTLDs is what we call either the delegation or the transfer, right?

Most of us will probably recall the last born country, which was South Sudan in Africa. So basically the process is I, icon doesn't assign the two letters which actually represent the country, but we just stick to the iso. There is one ISO 3166 or 3266, I can't remember exactly, but there is one ISO standard there which actually assign, assigns the two letters to the country. What ICANN does is via of course the IANA function is to actually implement and de delegate the management of this this internet resource, which is the country code, which is the digital identity of this country on the internet to the country to an organization which is called the ccTLD Manager.

And from there, the ccTLD manager is in charge of, running the operations of the ccTLD . Of course, from time to time we also step in when. It is related to a domain transfer, right? So over the years the ccTLD manager can change I mean within the country the community can decide that the, this organization, which has been ruling the ccTLD will now move into another organization or this function will shift.

To, to another organization. And I can also support a lot of that. Beyond that, of course I can from regional perspective as far as Africa is concerned, we are running now the the global, the Africa strategy 2021, 2025. And I'm quite lucky to be one of the 25 volunteers

in 2019, or 2018, I can't really remember, but 25 volunteers from the African community were selected to, to draft.

This this was before I joined as a staff. Were selected to, to draft the Africa strategy. And of course it was an open work. We we built from the previous Africa strategy. And we added some new trends and some new requests, some new items that the community has also been keen in seeing ICANN to implement in the region.

And this is what we, as ICANN staff in the region, we are following to actually apply. There are two major functions asICANNin the region currently the global stakeholder engagement. All of you I know Pierre Dannu who is leading this this group. And of course since four years now, we have the regional team for the technical engagement as well.

And of course more recently we came with the Coalition for Digital Africa as well. But I won't go into the detail of all of this now so far out of what Barrack said in in fact I can has ruled the first DNSX road show. Back in the years 20 14, 20 15 this actually helped let's say eight to 10 ccTLDs to effectively sign the zone file.

And this was a good progress at that time. After that some ccTLDs who benefited from this this DNSSEC Roadshow signed themselves they signed themselves. And now there is a revamp of this DNSSEC Roadshow as part of one of the Coalition for Digital Africa tracks. And so far we have been working with two ccTLDs since last year namely Bukina Faso and Botswana, so bf and bw for supporting them in signing their zone file.

Of course more recently just few days ago we have also started with the new CCT lds that have been selected for the for the DNS show. Tamlo is one of them, and thanks Bert. I can publicly say that. You are the first who responded to the letter that have been sent to the CC tds to officially kick off the project with with those countries.

Three weeks ago we had the, a webinar. Ican, the consultants and the seven CTDs that were selected for the, for this round of the DNS ratio. And yeah the more is is coming soon. And there is also a lot to say, but of course I want monopolize the session and we still have a lot of time to, to go into the details of what we do in terms of support in term of stakeholder engagement.

When it comes to the ccTLDs and what we, since four years now ICANN has been doing also in terms of technical contribution to the ccTLDs. Thank you. And back to you, Stephen.

Stephen Honlue: Thank you, Aziz. Thank you. ICANN is doing quite an amazing job out there. Let me get back to Barack with this follow up question, and I would like to know from you, Barack, what have you observed in terms of trends?

In their registration patterns of African ccTLDs in recent years. What factors do you think are influencing these trends?

Barrack Otieno: Thank you very much. And I'll quickly put back my presentation, Stephen. And some of the trends that we have observed probably over the last 10 years is an increasing interest from governments on operations of country code top level domain registries.

As I mentioned earlier, In the early 2010s most of the country code top level domain registries were actually operated by universities. But from between 2010 and 2020 we saw an increase in regulatory initiatives aimed at bringing the country code top level domain registries under control.

Yazid has talked about delegation. which is the process of determining who is the right individual or institution to be able to lead or guide a registry. In normal cases, you will find that country code top level domain registries, the administrative, the ultimate owner is the government. because they represent the people within a certain jurisdiction and the people normally choose the government.

It is worth noting that the difference between a country code top level domain registry and a generic top level domain registry is that a country code top level domain registry is governed by an international standard organization standard. It's called ISO 3166. This standard and normally ensures that a country code top level domain is given to an, a territory or a country that is recognized by the United Nations.

So if you have a territory or a country that is not recognized by the United Nations, it is not eligible for the country code top level domain registry. And then the Internet Corporation for Assigned Names and Numbers. Through its subsidiary, known as the Public Technical Identifiers, ensures that this code is put to the root of the Internet because it is the Internet Corporation who assign names and numbers that manages the root or the critical infrastructure of the Internet.

So I will not talk about generic top level domain registries because we have lucky here and we have a z. But what I want to say is when you buy A-ccTLD , you keep the money at home. When you buy A-G-T-L-D, the money flies out of the country. That is simple. So I'm simply just calling upon all of us to make sure that we support our country code top level domain registries.

The other a trend that we observed was a transition from academia to private sector led transition from academia to private sector led to an increased private sector role and interest from governments. As we speak, we have about 32 country top level domain registries that are under private sector management on the continent.

But as more people start appreciating the value of the domain name and the value of the ccTLD delegations are becoming very contested. And some of the major issues that ICANN has to deal with are issues of delegation. We are also witnessing limited cases of delegation as we create more awareness on how country code top level domain registries are supposed to be governed and the policy frameworks around them.

Again, we are noticing an increased push for self sustainability. I see a lot of country code top level domain managers on the call but let me stop at that and hand over the floor back to you, Stephen. I'll come back to my last slide later.

Stephen Honlue: Yes. Thank you. Yazid just in one minute please, can you also tell us what trends are you observing in terms of domain growth and market dynamics for African ccTLDs?

How these trends are compared globally.

Yazid Akanoh: Thank you, Stephen. Barack mentioned about this study, right? The DNS industry study. It is not Officially published yet very soon hopefully it should be in Kigali meeting in June but there have been some drafts already, and there is a first version of this of this report, which is available.

It was the Launched in 2017 or 2016. But basically today if you look at the current registrations at second level, we are talking about out of the 54 CCT LDS globally, we are talking about 4.3 millions registered domain names, which is still. I would say low but compared to where we were in, in 2016 yeah, there have been some growth.

So this is positive. If you also compare the internet penetration we are talking about 42% of internet penetration rate in Africa these days compared to 2028 or 29 percent few years ago. So here as well, there is like 13 to 15% growth. But when it comes to the CccTLDs themselves, of course there are some challenges and we'll probably talk about those ones later on.

There is, as Barack also mentioned we are noticing some more interest, especially from the governments now. Some ccTLD that were managed by, by, organizations or even people who are not in the country. Things are moving now and a lot of countries are working now into the into the transfer process.

To get a new manager a new registry manager for the ccTLD most of the time, the regulator, right? Or any other organization, which is. Which is supported by the national internet community. This is also a good trend that we are seeing, and we can talk a little more about some other trends like the idn.

There are currently six IDN ccTLDs, in the region, which is also meaning for Africa. We have so many local languages. So when it comes to universal acceptance and

internationalized domain name it really means for Africa. And we look forward to seeing more and more IDN ccTLD in the region as well.

There are many other trends like the number of websites that are hosted in in, in countries. There are some other enablers like the ips for instance, right? The number of internet exchange points, the number of data centers that are now localized within the continent.

And all of these are also helping, boosting the registration of domain names as Barrack said and keeping the money in the country instead of, putting or throwing the money out of the country. But we will come further into all those enablers as we go during the webinar.

Thank you, and Barrack to you as well.

Stephen Honlue: Thank you very much. Thank you. Very interesting. And I feel like one hour is not enough to cover everything, but yeah, we shall do our best. Let me now give the floor to Lucky, so that he can walk us through his presentation. Lucky. Are you able to share your screen?

All right. Thank you. So Lucky is going to talk to us what he has been doing with his organization ZARC in this space of Internet landscape. And

Lucky Masilela: yeah, Lucky, over to you. Stephen, thanks again. And again, it's only a pleasure to be part of this webinar. And good morning, good afternoon to all across the globe.

I think this is what I want to talk to. And as I talk to the agenda that I have, the norms, the ccTLD , what we know, how they function, and then I'm going to talk to trends, the update, then challenges, then I'll listen to comments and or questions from the floor. But one of the things that I want to take a minute in doing is to Just explain the journey or the space that I live in.

I always find myself that I'm in a very exciting space. I wear multiple hats and I choose which hat I wear or need to be wearing on a particular day. So today I'm going to choose between ZACR and ZARC. And this for me, All equally important entities that provide the domain names for South Africa.

The second level domains, and in particular, ZARC. ZARC is a new kid on the block. We are going to be seeing more and more of this, so you need to look at this logo very closely and get used to it because it's going to be occupying the landscape for the foreseeable future. And it's going to be your go to entity with regards to domain name and domain name support.

Now, What am I saying when I talk to the norms? When I talk to the norms, I'm saying the things that we know about ccTLDs, the things that we expect. Barack spoke to this ISO 3166, which defines the two characters, which are these unique identifiers for each country. We have our own unique identifier. Kenya has its own ke and this is to ensure that we live in that space of uniqueness.

And these identifiers, more than anything, they define that specific region. They live in that region. And being that, that it's a unique identifier associated with a specific country, that country determines the rules of engagement, how they will run, administer that name space. They decide on the policies, they will decide on the pricing, they will decide Who has access to that name.

And these are some of the things that the rules are not decided anywhere else, but in that country. And then and there. The other thing that were is worth noting is that historically the CTDs were only open to citizens of specific countries or of that country that would have that unique identifier.

Now we have seen some entities opening this up. And saying, regardless of which space on the globe you come from, you can access that name, whether it's call. ke or za, but then there are other countries that have closed it in, and that identifier is only used by the citizens of that specific country. And then the other thing that we have seen over the time, and Yazid touched on this, is that historically, the learning institutions were the ones that were the administrators or the technical contact for domain names, and thus this made a domain name a thing that belongs to the elite or belongs to universities.

and does not necessarily belong to the rest of the community. And this is a norm, and now this is not domain names should be open to all, and this is a thing. And then the other thing that's worth noting is that the trends in the ccTLD are no longer unique, and they are not necessarily spread or spared from the impacts that are faced by your generics, or let's say your geographic names, etc.

They are also impacted. And then the domain namespace and the consumers I named are faced by the similar challenges. We'll talk to those challenges in the next slide. And More than anything else, these names are just as vulnerable. Actually, the interesting thing is as you grow your namespace, you become vulnerable.

It is almost like using the, an analogy or example of lightning. If you stand out, you are very likely to be struck by lightning, but if you are shorter, you are safe from lightning. So the namespace, the more names you have. The chances of being vulnerable or facing vulnerabilities is very high. Let's see next slide.

When we now look and talk to the trends, one of the things that has been very topical across the sector is domain name abuse. We have seen an escalation in domain abuse, which has taken many forms. And this has necessitated for collaboration. It has called for every entity that functions in the domain space to come together.

It's almost like a groundswell and ensuring that we have to manage this scourge that is attacking the sanctity of our domain namespace. And of course, even for us today, it has meant that we are almost moving into a space that is looking into content in the process of managing issues of domain name abuse.

because of the manner in which it has scaled itself. It is very broad and we need all of us to be participating in ensuring that we can tackle this scourge that is currently facing us. And one of the things that has recently come in and it's not really a new thing, GlobalBlock, and GlobalBlock has been there in a different model, different structure.

www. globalblock. org But today we have seen a global block coming in where entities or name holders or brand holders are able to have their names blocked across the globe. Thank you very much. Different jurisdictions with subscribing with one entity, and you would have this happening across different names.

And then, and this we have seen, it has started off, and it is gaining traction, and it will be one of the things that goes into the future in dealing with name theft, and probably and definitely with domain fraud. abuse. We have also seen an increase in the domain name 2. 6 percent year on year globally.

And then these are good news in the sense that COVID did a few things to the domain name growth. It had fed a bit of growth and it created a big spike, and this spike was immediately seen by a decline. And the prediction is that we are going in the next foreseeable future, we're going to see A slight increase in the domain names, and this is going to be feeding into what we need to be seeing, the market into 2026 will be sitting at just above 550 million names, which is a good indicator, but these indicators, they, you will see, they do not talk much to our market, Africa. And there has been an increase in the an increased penchant for premium names. People want names that talk to themselves, flowers. codot za or any other name that associated with premium name or names that identify one or the service that they are currently We also have seen more migration away from the second level domain name signing and signing directly onto the top level domain. The latest country code that is adopted signing onto the top level.

is Australia under au. You would notice in South Africa, we do not sign on the top level domain. We still sign at the second level. We have COdot za. We don't have directly where you would say Masileladot za. You have Masilela. COdot za. And this is some of the things that we are seeing. It is changing. However, some countries already on the continent are signing directly.

On to the top level and also on the second level. And what is trending also is some of the country codes are being used in various other functions. For example, they would be used in the technical space for artificial intelligence, which is your AI or Your IO, which is the British Indian Ocean, it's used equally for the technical space, dot tv used for the media space and co being used as an alternative to com.

And all of these things have added value to some of these country codes. And you would notice that these country codes are coming from very small And these islands have suddenly seen their names registered in the millions. And whilst we're looking and talking to the trends regarding the ccTLDs, we cannot ignore the things that are happening around us.

And one of the things that's happening is that we have generics, we have geographic names, and that Those are equally growing and occupying the space that we are functioning in, and there's a next round as anticipated for the year 2025. We have also domain names being used as a weapon, and again, we will talk to that in the next slide.

And we've seen the demise of a free norm, which means they really, some of the names that we've seen in Africa being registered sitting in the millions, or 3 million, 5 million in different countries. Have now come to almost a dead end. There are not going to be any new names taken under free, but those that are there will continue.

I'm not sure for how long there as free names, but this has come to an end. It has seen it. And so in Africa we will have that 3 million names that were cited by Yazid are the names that are paid for by the users across the globe. And some of the challenges, again with the ccTLDs is the weaponization of domain names, where these names can be used for extortion if somebody hack you or they Spam and exploitation of users.

So this has become a new form of warfare that we need to be aware and alert to, and how to deal with this new form of warfare. And then domain name use taking a center stage, as I had mentioned in my previous slide. One of the biggest challenges in my view today is the politicization of domain names.

And the more we see tensions brewing and growing globally, we are seeing some entities politicizing domain names. And this, for me, is going to risk what we know today, this one world and one Internet, being fragmented. We have to be Very cautious of this and how we deal with some of these challenges that are facing us.

Lastly, these are some of the opportunities that the continent has. I think As a youth empowered the nation or continent, there is a future for us to grow. And the figure that we are still occupying 0.3% of this, the namespace globally it's room for me. It's a measure that says that there is growth, there is possibility.

We are looking at a population of 1. 5 billion people. And if you compare this number with Europe, which has close to 750 million people, it occupies a lion's share of the domain name registered, which is 58. 6. And I believe we have this opportunity, this future for growing and occupying that space. There is Number of names to choose from.

We are spoiled for choices. We have 54 names to choose from. And I believe, where all of these things will be built around the growth of more data centers on the continent. On that, Stephen, I thank you. And that is where I pause. Cheers.

Stephen Honlue: very much, Lucky. That is quite insightful. We can see the many opportunities that we have at hand, also the challenges and how you tackle them.

We are very hopeful to see this space growing with all the advances that you've shared here. Let me just bounce back on Zach. So what strategies have you implemented to address the evolving registration patterns and domain growth within the South African region, the South Africa and mainly the entire region.

Lucky Masilela: Thank you. Us we have used one formula and we continue using it up until today. And that is Ensuring that our users have trust in our domain name. And we have also managed to ensure that South Africa corporate or the South African companies have built strong allegiance with the name co.

za. A large percentage of corporate South Africa uses codot za. And that for us, it augurs very well, it protects, it ushers that name into the future. The other thing that we have made sure that we address very strongly is our technology and making sure that we have a very stable technology and we shouldn't have anything that breaks, that falls apart.

And we have successfully managed and maintained that. And finally. What we have done is we have tried to be as cost effective as possible. That is a difficult thing, but it needs for us to continuously manage our profitability to make sure that We do not overextend ourselves in in terms of administering or running our networks.

So those are some of the things, being cost conscious, as robust strong technology, making sure that there is trust, and ensuring that those influencers, they stay behind us, particularly that South Africa corporate and the citizens. That was the formula that we've used up until today. Yeah.

Stephen Honlue: Thank you very much.

Basically you need to make the name respected. So that it attracts people for to, to their name and yeah, that's a lot of incentive. So I'm going to give the floor now to Albert Kanga so that he can walk us through his presentation, what he prepared for this session before we can continue with questions.

Albert Kamga: Thank you, Stefan. Good morning. Once more to all the participants to this webinar. I told you forgot, I am in this room, , but fortunately it's not the case. , it's not the case. I am reassured for that. In my introductory words, I will just say some few

words about Cameroon and c the ct C Ctdm as the participants know the Cam Camero is in Central Africa.

Gulf of Guinea, we have neighbors like Nigeria at the west, Central African Republic, Gabon, Congo, and so on. So when you have a great neighbor like Nigeria, you cannot be it makes difference. Cameroon now is the population is estimated at 30 million inhabitant. And, but the penetration, the internet penetration is just around 45%.

So that is still below the average in the world. Enough of efforts are still needed for, to improve. And the concerning CCTL, it was created by Icon of course, in 1996. At the time, managed by Intel Cam and then by Camtel, the incumbent telecom operator in Cameroon. And ANTIC, that is the National Agency for Information and Communication Technologies, a government agency for which I am working now.

ANTIC took over in 2009 and we have been struggling since. Since then for the full transfer from Tel to Antic. And we finally succeed early this this year. That was exactly on the 24th of January, 2024. If I can say if I can give some figures concerning the.cm, I will say that now we are, we have around about 45,000 names.

Registered in our database and we are, we hope that we will reach again because we reached, or we have already reached 50,000 in 20 20. That was following a national promotional campaign on dotCM. And so we hope that by the end of this year, we will be around 50, again, 50, 000. A domain name register for the registration of a domain name in dotCM the feed.

Is that is 7,000 from CFA. That is almost 11, $12. So that is one of the cheapest C ct LD in Africa. And we have now 20 partners, 20 registrars. ANTIC is no longer registering names directly, but we relay on that on the registrars,

those that receive agreements for, to, for that activity of registering domain names in CM. That is what I can say for my introductory words, and I am very happy to be part of this panel, and I am open to all the questions. That you can have for CM or even for the concerning the management of ccTLDs in Africa in global.

Thank you very much, Stefan.

Stephen Honlue: Thank you. Thank you. Let me just bounce back on you. Do you have any initiative or collaborations? I already heard about you collaborating with registrars. When you've delegated the registration ANTIC is not anymore in registration yeah, that's good.

Do you have any other initiative, collaborations aimed at harmonizing the ccTLD policies? And regulation across the countries in the region.

Albert Kamga: Of course, yes, for the policy in terms of the the charter for the registration and management of the CM, we have a multi stakeholders approach. Even though ANTID is a government agency, we work closely with private, with universities, with civil society to, to have a common approach for how things should be done.

Concerning the registration of the domain names in the ccTLD . CM. And is clear for what should be done concerning the registration and we are also having a Working with those partners and stakeholders to make the process more transparent and to be accountable, because most of the time you will see that in most of the, in most of our countries.

There is a lack of information available on the ccTLD and we are working to try to improve the situation as far as the dotCM is concerned. And if I can also talk about the partnership just Mentioned by Yazid. I thank him for that. Cameroon has been retained for the DNSSEC Roadshow.

And we are really, we are fully committed to that project. And by the end of this year, we hope that DOTCM will be presented as a success case of the implementation of that extension. Maybe I can even with the AFTLD from next year, we will try to reinforce our collaboration with that organization so that we can not only benefit from the experience of the other managers of the CTLD, but also share our experience

concerning that management. So it is a dynamic approach and we are open to all what we can, to all the partners who can help us to improve the management of our country code. Thank you very much.

Stephen Honlue: Thank you very much. And now let me pick some questions from the Q& A. The first one I would like to bring back Lucky on this question.

Thanks. Talking about DNS abuse. What are you doing in terms of domain privacy as regards to the, who is data? Lucky if you can address that.

Lucky Masilela: Yeah, thank, thanks. Musa Steven it's a simple thing when it they comes to who is the, who is always redacted. We do not have the information regarding the end user. We only have information regarding the name, it could be the server where it's hosted, and the registrar, but the registrant details are always redacted.

They are not available. And this would only be released if the security force is needed. But then, under normal circumstances, who is redacted. Limited access to information on the details of the registrant. Thank you. Then, yeah, sorry. Sorry, Chair. Go ahead. I see there's another question, I think that's for me, that talks about from Ismael.

He says, can you give us examples of practical things you did in South Africa to build trust in the ccTLD and get corporations? To use it. The things that we have done in

building trust is that we apply and still believe in the triple R model, which is the regulator performs the function of a regulator.

It is reinforced. The registry performs a function of the registry and the registrar. Once an end user sees the separation and distinction of functions, that only brings trust. The other thing that we have done is, the regulator in South Africa, whilst in most countries it could be seen as a government driven entity, our regulator in South Africa is a member based organization.

It partly reports to government. And on one leg, it has members, and it is also a not for profit company. So we, with that kind of a model, that brings trust because People tend not to trust when government is handling the information or their information. They fear for overreaching actions by government.

So we believe that what we had done had brought in trust in the namespace and ensure that more corporates up taking the namespace CO dot za, just purely on creating a structure that is ring-fenced, the Triple R model in particular. Thank you, chair.

Stephen Honlue: Thank you so much. Lucky. Let me just follow up on on the collaboration part where I want to bring Barrack.

How important is collaboration and partnership among African ccTLD registry? In addressing cyber security concerns enhancing the online security overall.

Barrack Otieno: Thank you very much, Stephen. Let me use the analogy or something we commonly say that we are as strong as our weakest link. I think if you look at the African continent there's a lot of interrelation among our countries. In fact, in some of the places. The borders are basically artificial.

You go to South Africa, you look at Lesotho, you look at Eswatini you find they are, okay, let me I wanted to say it's all it's territories within territories. Meaning that we are very interrelated and what then happens is if, for instance most of us, I'll use the example of sharing passwords the moment you get a Netflix account in Africa it becomes an account for the community.

You will see someone watching it in another district, in another place, and then you find that if there's a cybersecurity concern, most likely it is likely to be because of someone who went and logged in a cyber cafe and forgot to log out. Even at times when it comes to issues like banking you go to visit your grandmother in the village and she gives you the And nowadays we don't have so many chicken, so most likely you will be given the ATM card to go and withdraw.

So those are communal practices which really expose us in the new dispensation. And it's important that based on the collaboration that I explained before between the

country code top level domain registries we go further and grow this into communities of practice that help each other whenever there is an attack and we've had scenarios I'm sure Yazeed and Tim are always dealing with such issues.

where ccTLDs are compromised technically and sometimes they don't even know. And you find that it's people from other countries who actually tell what is happening and sometimes You find a small group of ccTLDs and technical experts in the community coming together to help that community to address the challenge.

We are seeing a trend in Europe where the CccTLDs are coming together through working groups. And again, at AFTLD, we do have working groups that look deeply into security issues. They form some sort of a computer. Emergency teams, we have CSATs, and we have SATs, and you know that you can have SATs that are sector specific, and I think these are some of the best practices that indeed we can be able to advocate for and embrace within the African continent.

So I believe security is a collective challenge, that's why we have our national police, but also we have INTERPOL. For us to be able to address matters that may transcend our borders because you find, again, due to the nature of the internet, sometimes a crime is perpetrated across the border and you find that it's very difficult for you to be able to address it.

And I know that I can, has been convening stakeholders through different working groups. to address some security challenges or to find common ways of addressing security challenges that are of a global nature. And I don't think for ccTLDs we can be left behind. I think let me leave it at that.

I will come back later after probably my other colleagues also contribute or chip in.

Stephen Honlue: Okay, thank you. We have some questions. I would like to pick this one from Mr. arbex. Mr. Abbott for the CM ccTLD do you welcome international registrars, or do you only have national registrars?

Albert Kamga: Thank you for that question.

For now, we we don't welcome international registrars to have the the authorization to be the registrar of CM. You need to be a local company. But what we are what we are observing is that sometime local company obtain agreement, but they have platform open globally, and they can even have partners through which they can register domain name in CM.

But to obtain the authorization, you need to be a local company. Thank you.

Stephen Honlue: All right. Thank you so much. Mr. Loki can you share the steps that you've taken for the z the ZE registry to promote increased domain registration despite not having regulations, authority on this

Lucky Masilela: Very tricky share the steps taken. Look, we've traveled a journey, as I had mentioned earlier on, our journey of getting to where we are today is a journey that is marked by there is a point in time where we were registering one name per week. Today, we are talking about close to 5, 000, names and above.

We can, we have about 20, 000 names registered in a month, we can have in the COVID period, we had a bumper harvest, I call it. We had over 75, 000 names registered for the year 2022, so this is a good trend in terms of domain name registration. And this builds on a legacy of events. One, when we dealt with the issue of price, We reduced our pricing significantly in the nineties.

And the next thing that we did, we introduced EPP. This enabled our registrars to register names at ease. And there was more secure system and it was easy for our registrars to register domain names. The third thing is that in, in this changing from this old technology to EPP. We equally brought in training.

We had to train our registrar market to make sure that they were fair with EPP, which is the extensible provisioning protocol. The next thing that we did in in the training is that we did not close the registrar community. to be only South African. We have opened up our market to have registrars from outside South Africa globally who can have access to CO.

ZA. The next thing is you do not need to be a South African citizen to have access to the name COdot za. So all of these factors, all of these actions, they fed into this growth of the COdot za namespace to what it is today. Today, we are proud to say that we're sitting on the edge of 1. 3 million. If you combine all the names that we have, the four SLDs, we are sitting around 1.

4 million. So that, that for us is a good indicator of the steps that we took to get here from the 90s to now today in 2024. are still working. The separation of the functions, that triple R model that we've been using, we still believe it is applicable and we believe that it is something that is worth investing in and adhering to, not only for us as a country, but for the continent.

It works. Thank you, Chuck.

Stephen Honlue: Thank you. Thank you so much. One thing, how does this improvement, how do they support and promote local content and businesses?

Lucky Masilela: Is that my question? Yeah. Ah yeah, of course. Look, the AFTLD for me, the way we see it is our referee, and not only a referee, they are also a coach. And not only that, they also provide a marketplace for us to share ideas. AFTLD on the continent is responsible for ensuring that the ccTLDs in each country are being respected and adhered to.

It also assists in the growth of ccTLD operators. I admire one of the things that they've always been champions of, to ensure that. The technical solutions on the ccTLDs and the technical providers at that level have to be from the continent and particular from that specific country. That on its own will assist in growing the number of users and end users, including bringing in the trust that we're talking about.

We have seen a number of ccTLDs on the continent being administered outside those countries or even outside the continent of Africa being administered by some entities outside the continent. of Africa. And AFTLD has always been the champion of ensuring that those responsible countries, those specific countries that are still stuck in that model, need to bring in those country codes back to their country.

So for us, it is an important vehicle that has brought in a lot of results and it is still capable of bringing more value into the future, particularly the future of TD namespace. Thank you, chair.

Stephen Honlue: Thank you so much. I'll now go to ya. And let's look at the, and of the infrastructure in the region, how is this impacting the efficiency of African ccTLDs registries?

That's it.

Yazid Akanoh: Thanks Stephen. Lucky has already touched some of those those key limitations. And as I said before there, there is this DNS industry study report yet to be published. Which also showed some interesting figures, right? So when it comes to these challenges, there are multiple reasons how many, even how many Afrinic members are present in, in the country. And there is a correlation also between the public IP before as or delegated prefixes to, to the country and the growth in term of of registered domain names.

When you consider the overall continent 54 countries, but the report has also shown that let's say 10 to 12 let's say the, can be called The most leading the most performing, and there are the rest that can also be divided into two categories, the ones in the middle, they are probably the largest and the ones that, that are definitely lagging behind because of a certain number of challenges at policy level.

At infrastructure level also at how the, who is the current ccTLD manager as we, we discussed that previously, is the manager still out of the country, which means that your

national digital identity is, let's say, controlled. By an external entity, and this will definitely not really help, in growing the number of registered domain.

Then also at that regulation, and this is one of the roles that ICANN Global Stakeholder Engagement actively does. They quite often meet with the regulators and make them also understand that having an eye into the domain name industry is really a need, especially in these times when we have seen a lot of countries that are now providing digitalization and yeah, digital services to the citizens.

So the need is there the opportunities are there, but still what we are noticing is that there is a sort of disconnection. between the, let's say, the legacy telecommunications and the legacy digital economy system or infrastructure and the domain name system. So how can we make this, these connections?

Some countries have succeeded, right? Others are learning also. And out of the the the DNSSEC Road Show track that I mentioned being part of the Coalition for Digital Africa, there is also another track, which is called the ccTLD , capacity Development. And we are partnering with AFTLD.

And other organizations like NSRC and AFNIG and ITU to put our efforts together, right? And getting those ccTLDs that are lagging behind. To learn from the well succeeded being CCT LDS and learning and applying what is working very well elsewhere.

Should probably also work in our country. Of course countries are different from if I think the internet penetration in Eritrea, which is like 8% compared to other countries like Kenya, we are talking about, I think, 85% so there are those gaps.

And when we talk about internet penetration, it also considers so many aspects costs infrastructure, regulation, and all of this is also impacting the DNS industry development. But there is, at the same time there, there are good hopes. There are good hopes.

If you compare in terms of infrastructure back to, to, to 2016, 2017, and you compare to today in terms of submarine lending cables in the countries even the locked the landlocked countries are getting, of course. We are seeing east and southern Africa leading this this in term of how we are also interconnecting the countries in term of fiber optics to enhance the networks reachability and also the network performance.

But at the same time, at the regulation layer, how can we make the prices more attractive? How can we also open the market for competition? Because if the market is not open for competition, this is also another challenge. And then, registering, the registration of the domain name is one thing. But there are side pieces that are also needed, right?

We need to host those domain names somewhere meaning that we need some name servers to, to host this domain name. So there is a need of servers, there is a need of space the domain names usually for, websites, emails et cetera, et cetera. So there are those site services.

That we also need to to make really available on the on the continent in terms of again, data centers and and services that can be available immediately so that registrars can provide a sort of package. I register for a domain name, but the registrar can also provide me with the remaining additional services instead of getting the domain name at the ccTLD but hosting it somewhere else out of the continent.

But also, there is power issue. And many other kind of of limitations. But let me stop stop here and and see if we have many other other contributions as well. Thank you.

Stephen Honlue: All right. Thank you very much. So we are above the time and we still have a lot to cover.

However I'll just give the floor to each of the panelists to just give us a brief closing words since we, we have exhausted our time. I'll start by Yazid again, if you can take two minutes to give us a closing a closing words.

Yazid Akanoh: ThankStephenhan. That was a good conversation. I will probably end up by talking about hope.

We are coming from very far. I mentioned about 4. 3 millions of registered domain names for the for Africa market, right? And of course ZD is far leading this with with more than 1. 2. 3 million of registered domain names, right? At the same time, we have seen some CC tds that were known as domain hacks, right?

I once provide names here but the trend is changing now. And when we see the comparison between 2016 and and the last DDNS industry report we can see some drop there as well. Of course, there are still one or two ccTLDs still facing this challenge. All the rest of the ccTLDs are also growing very slowly, not at the same trend, definitely.

But as we also discussed that during this webinar, there are a lot of enablers that we can also see that each of them is showing some positive sign of hope if I con consider the Internet penetration the domain markets, how it is getting digitalized and all of this. Let's continue this hard work.

Let's also continuing in terms of collaboration in learning how we can see the best practices. From the technical operations, but also from marketing and from business side. Thank you. And over to you Stephen.

Stephen Honlue: Thank you very much. I'll give the floor to Ed to share his more on, on the CM and his closing words.

Thank you, ed.

Albert Kamga: Thank you, Stephen. After Cameroonian, the word you, you know that Yazid is Cameroonian, actually, right? Yeah, exactly. So my word is also a word of hope, hope because we are now we have now some new solutions even for internet access, global access, you have probably heard about solutions like Starlink.

I think that it will help, those solutions will help bridging the digital divide in Africa and between Africa and the world. So that is a hope. And I also believe that working together within organizations like AFRICAN top level domain organization will help share sharing experience and even reinforcing the infrastructure because I am even thinking about something like reciprocal Hosting of secondary servers let me let me explain a bit.

I can be the manager of CM. I have an arrangement with the manager of ZA and ZA can host my secondary server while I host the secondary server of ZA. I think that developing partnerships like that will help. Improving the DNS industry in Africa, providing the users stable services, reliable services, available services, so that we can really contribute to the development of the information society in our country.

on our continent. Thank you very much. I told you that it was a pleasure for me to be part of this panel. I hope that we will have some other opportunities to discuss about the DNS industry in Africa. I particularly thank Yazid, who is the project coordinator of that DNSSEC Roadshow, I reassure him that we are fully committed to that project and that we are, we will do what, all what is required from us to be a model on the implementation of the DNSSEC.

So thank you very much to all the participants. Thank you.

Stephen Honlue: Thank you very much. I will give the floor now to Barrack to give his concluding words. Thank you, Bharat.

Barrack Otieno: Thank you very much, Stefan. Mine is to thank the audience. I've been looking at the numbers. They have really been engaged. And thank you for listening.

More importantly let's go back to our villages because I'm talking to Africans. and bring all our people online because it is not worth of any worth for us to have these conversations when the numbers are not growing. Just to give a global perspective Yazeed has said we have about 4 million names according to the studies that have been done by ICANN.

Globally, we have about 360 million domain names across all the top level domain registries. Of these ccTLDs are about 140 million and Africa is only contributing 4 million. So do the numbers and see how effectively we are playing. It's a big opportunity, especially for the youth. And let's just have simple solutions.

80 percent of the ccTLD registrations are in the European region or center region. And sometimes for those who've traveled to Europe. A simple memo or a simple bus schedule is on a domain name. Let's keep it simple and make sure that we use domains in ways that can be able to benefit our local communities.

I cannot end without thanking AFRINIC. AFRINIC hosted Africa Top Level Domains organization for the first 10 years of its existence, until the Kenya Network Information Center took over the responsibility of ensuring that Their organization has a secretariat. Secondly, I want to thank Ican. I have said a lot, but we have been here because we have worked hand in hand supporting each other.

We have also worked hand in hand with the internet society. Most of the issues that we've done together, the ZedE Central Registry. One of the lucky here is a true elder. When there is a problem, I make sure we run to him and they are reliable. I've seen Mark Elkins. We have done trainings. He has driven across Southern Africa to come and deliver the trainings.

What I'm saying is, let's ask ourselves, what can we do as Africans to change the narratives of our ccTLDs? We also have organizations like the OIF. Which supports development in the Francophone region. They have supported us in a great way in ensuring that we achieve some of the things that I have talked about.

AFNIC, the French ccTLD who is actually an associate member of AFTLD for supporting even the initiative that we are doing with ICANN. on the Coalition for a Digital Africa. We have the Public Interest Registry and the other regional organizations that have also been really supportive. Indeed, this journey has been because of collaboration and not competition.

And I think for those who are joining us for the first time, this is the spirit. Let's hold hands together, make sure we have localized initiatives, Where Yazid can support you, they'll support you. Where we can support you directly, we'll support you. But for the African ccTLDs, let's come together and forge a unified front in tackling the issues that are facing us.

Thank you very much and back to you, Stephen.

Stephen Honlue: thank you very much. I see is it a question that you posted in the Q&A, Barack? Was that a question for Lucky?

Barrack Otieno: Ah, I think somebody's logged in as me.

Stephen Honlue: Ah, okay. I shared

Barrack Otieno: the link to several . It's a security problem.

Stephen Honlue: Okay. . Yeah. The same security problem you said pointed out earlier with the analogy of the Netflix accounts being shared by many.

All right I would like to feedback, I would like to, I would like feedback from Naki on the move to use to the use of EPP. I can understand its benefit, especially when processing 5, 000 domain. However, when this is automated, it means that there is nothing to protect.

Thank you very much. Registrars from submitting faulty registrations, for example, obvious passing off potential fraudulent applications registrations of trademark names without authority. Consultants registering client domains in their own name, application with clear errors. Application with LIM garbage and so on.

Perhaps the best option is to implement EPP to automate applications, but on a provisional basis, followed by a manual check for the above issues. If you want to bounce back on this, luckily, before you give your closing remarks. Thanks, Stephen.

Lucky Masilela: Actually, this is a beautiful question because efficiencies have equally their own challenges, whilst there is an efficient method of creating names, which is this automated system, it also has those porous areas. But we also have systems in place to ensure that once a name is registered, it belongs to that person, and also there is an agreement that is entered into with the registrars to ensure equally That in the registration process, the entity that is creating a name is a legitimate person.

We are guarding against this thing both at the registrar when the name is created. And also, once a name is created and registered, people can query a name and we can take it down, we can put a server hold on that name, or we can delete it if it belongs to someone else other than the person that has created it.

It is a foolproof system, but of course, efficiencies equally bring those challenges in place, but it's how. We manage and deal with once that the matter has happened, we are more open and proactive and ready to deal with some of these instances. So we can talk more with Mr. jim there, if we can contact us.

At registry. netdot za, and we can, talk more about this. And also as my parting shot, Chair, I think and then the audience across the continent is to say thank you again for staying long and in, in the chat. And we need to manage the following things that I've spoken to.

We need to address the issue of domain names being weaponized. One of the challenges that we need to manage. And two, we need to manage the politicization of domain names. which have a risk of fragmenting this one Internet that we know. We have to guard against that. We have to collaborate to eradicate domain name abuse.

This is one of the biggest challenges we have today, and until we collaborate, we're not going to be able to deal with it. Remember, those guys behind the scenes, the bad actors, are collaborating. If we see ourselves as good actors and not collaborate, we're not going to win this one. And then we also need to ensure that our youth and businesses begin to use our local ccTLDs.

We cannot allow them to walk away and use ccTLDs away from their local areas. And finally, I think we need to strive To have that 43 percent of internet users, that penetration that we are talking to, 43 percent internet penetration on the continent does not reflect nowhere close to the names that we have, 4.

5 million names on the continent. So if we can have that 43 percent internet users, Use or acquire a domain name, a local domain name. We think we should be able to achieve that. And finally, to the registrars out there, don't sell just a domain name. Sell an email address. And you will see the difference.

Sell an email address under ke or za or cn. And I want to take up that offer from my colleague, and we will be collaborating and talking. Thank you.

Stephen Honlue: Thank you so much. It was quite inspiring, the custom words collaboration to have a secondary Domain host that's very important so that if you have reliability and your services are always up.

And also, don't only sell a domain name, sell an email address. Very important. And I would not like to close on these notes where we only have 3 percent of the domains of all the ccTLDs that we have sold. We only have, Africa only has 3 percent of those, so we need to boost that collaboration among all the ccTLDs, so in Africa, so that we can get these numbers moving up, why not have 20, 30, 50%, why not?

So thank you very much, all of you, for the insightful thoughts that you've been sharing with our participants. We managed to keep To keep them busy till now, that's probably actually it, and if you look in the chat, there were quite a lot of interaction. Thank you, Mark Ekins, for the resources that you were sharing on the, in the chat.

I see good links there where we even have trainings organized by Zach. Thank you for all of this. And this is the end of the webinar. We'll invite you to, there will be a popup when we close. The zoom for inviting you to. To give your feedback about these webinars, we want to keep improving these webinars, and if you have topics that you think we can cover, feel free to type in the chat.

If you want to, if any participants feel like they have something to share, please feel Don't hesitate to write to us, AFRINIC, at contacteuroevent. afrinic. net, and we'll get back to you. So thank you everyone for being here. Thank you very much, and see you in our next webinar. Bye bye.